

River Bend 1

Initiating Events

Mitigating Systems

Significance: TBD Sep 18, 2002

Identified By: Self Disclosing

Item Type: AV Apparent Violation

Failure to properly lock open condensate valve resulted in loss of feedwater flow following reactor scram.

(TBD) The inspectors identified an apparent violation of Technical Specification 5.4.1.a, which required that written procedures be established, implemented, and maintained covering the applicable procedures recommended in Regulatory Guide 1.33, Revision 2, Appendix A. Regulatory Guide 1.33 lists the condensate system as one of the systems requiring operating procedures. System Operating Procedure SOP-0007, "Condensate System," Revision 21, required that Condensate Prefilter Vessel Bypass Flow Control Valve CNM-FCV200 be locked open. On September 18, 2002, Valve VNM-FVC200 was found to be improperly locked in the open position. This failure to properly lock open CNM-FCV200 resulted in unexpected closure of the valve and a loss of feedwater flow to the reactor vessel following a reactor scram. The final significance of this issue will be determined using the Significance Determination Process.

Inspection Report# : [2002007\(pdf\)](#)



Significance: G Aug 15, 2002

Identified By: NRC

Item Type: FIN Finding

Ineffective corrective actions caused station blackout diesel generator to be unavailable

On August 15, 2002, the licensee performed a routine monthly performance test of the station blackout diesel generator. Four minutes into the one-hour run the diesel generator tripped on high coolant temperature. Similar failures of the station blackout diesel generator to run due to high temperature trips had occurred in each of the two previous monthly performance tests on June 21 and July 19, 2002. For each of these failures, the licensee identified an apparent cause for the failure and corrected the problems identified. Following the failure on August 15, 2002, the inspectors determined that the licensee-identified causes for the previous station blackout diesel generator failures were not accurate; therefore, the corrective actions taken were ineffective. The inspectors evaluated the ineffective corrective actions taken to correct two failures of the station blackout diesel generator using inspection Manual Chapter 0609, "Significance Determination Process," Appendix A, "Significance Determination of Reactor Inspection Findings for At-Power Situations." The inspectors determined that the finding was more than minor in that it affected the operability and availability of a risk-significant mitigating system, i.e., the station blackout diesel generator. The inspectors determined that the failure to maintain the station blackout diesel generator operable was of very low safety significance (Green) because of the low likelihood of a station blackout event occurring, the probability that operators could restore the diesel following an initial failure, and the availability of all other standby electrical systems. This problem identification and resolution issue was entered into the licensee's corrective action program as CR-RBS-2002-0664.

Inspection Report# : [2002003\(pdf\)](#)



Significance: G May 29, 2002

Identified By: NRC

Item Type: FIN Finding

Increased Division I Emergency Diesel Generator jacket cooling water leak rate caused diesel generator to be operable but degraded beyond the licensee's existing evaluation

Following maintenance performed on May 9, 2002, to determine the source of a leak from the Division 1 emergency diesel generator jacket cooling water system, the leak rate more than doubled. The licensee's attempt to correct the problem on May 30, 2002, resulted in another increase in the leak rate to the point that makeup to the jacket cooling water system would be required within approximately 2 hours of Division I emergency diesel generator operation during a loss of offsite power. Although, the cause for the increased jacket water leak was repaired on June 4, 2002, the diesel generator remained degraded, but operable. The licensee planned to repair the original leak during the next extended diesel generator maintenance outage. The inspectors determined that the increased leak rate was beyond the licensee's evaluation that concluded that the Division 1 emergency diesel generator was degraded but operable. If left uncorrected, the jacket cooling water leak could have caused the emergency diesel generator to become inoperable and unavailable. The normal source of makeup water would not have been available during a loss of offsite power and the licensee did not develop a written procedure for use of an alternate makeup source until May 30, 2002. Using the significance determination process, the risk significance of the finding was determined to be very low because the emergency diesel generator remained operable, although degraded. This maintenance induced problem was documented in the licensee's corrective action program as Condition Report CR-RBS-2002-0672.

Inspection Report# : [2002002\(pdf\)](#)



Significance: May 12, 2002

Identified By: Self Disclosing

Item Type: FIN Finding

Operator action caused a high reactor water level trip of the running reactor feed pump following a planned scram from 26 percent power

Following a planned reactor scram during a plant shutdown, operators failed to take manual control of the feedwater level control system in time to stop an unexpected rise in reactor water level until after the running reactor feed pump tripped on high reactor water level. The licensee determined that the reduction of the reactor pressure control setpoint and subsequent opening of the main turbine bypass valves caused a "swell" in reactor water level which contributed to the higher than expected reactor water level transient. The inspectors determined that the operators did not manually close and isolate one of the two automatic feedwater regulating valves in time to eliminate leakage past the feedwater regulating valve, and failed to reject water from the reactor through the reactor water cleanup system in time to stop the rise in reactor water level to the high level trip of the reactor feed pump. The failure of the operators to manually control reactor water level resulted in the unavailability of a risk-significant reactor feed pump. The inspectors, using the significance determination process, determined that the safety significance of the high reactor water level trip of the running reactor feed pump following a planned reactor scram was very low because the reactor feed pump was restarted from the main control room as soon as reactor water level was lowered and the high reactor water level trip signal was cleared, and other reactor water makeup sources remained available. This human performance error was documented in the licensee's corrective action program as Condition Report CR-RBS-2002-0688.

Inspection Report# : [2002002\(pdf\)](#)



Significance: May 11, 2002

Identified By: Self Disclosing

Item Type: FIN Finding

Station Blackout Diesel Generator inoperable due to discharged starting battery

The station blackout diesel generator was found to be inoperable by the licensee because its starting battery had been allowed to completely discharge. The station blackout diesel generator had been moved from its normal storage location as a contingency for a planned maintenance outage on several Division I safety-related systems. The inspectors determined that the Division I maintenance outage contingency plan and the weekly work schedule did not plan for the return of the station blackout diesel generator to its normal storage location to re-energize its battery charger. The licensee determined that this is a repeat of a similar event of April 4, 1998, documented in Condition Report CR-RBS-1998-0384. The failure to maintain its starting battery charged caused the risk significant station blackout diesel generator to be inoperable and unavailable. The inspectors, using the significance determination process, determined that the safety significance of the unavailability of the station blackout diesel generator was very low because the length of time the diesel generator was unavailable was less than 24 hours and all other electrical systems were available during that time. This human performance error was documented in the licensee's corrective action program as Condition Report CR-RBS-2002-0664.

Inspection Report# : [2002002\(pdf\)](#)

Barrier Integrity

Emergency Preparedness



Significance: Mar 20, 2002

Identified By: NRC

Item Type: VIO Violation

Failure to develop a range of protective actions, disseminate emergency response information, and maintain the emergency plan for members of the public located within the owner controlled area

The inspector identified one preliminary finding involving the failure to develop a range of protective actions, disseminate emergency response information, and maintain the emergency plan in accordance with the requirements of 10 CFR 50.54(q), planning standards §50.47(b)(10) and (7), and 10 CFR Part 50, Appendix E, section IV(G) pertaining to members of the public located in the owner controlled area. Three apparent violations are associated with the finding. The issues involved: (1) a failure to establish effective means or provisions for warning, advising, evacuating, and monitoring members of the public during an owner controlled area evacuation, (2) a failure to disseminate emergency response information to the public using facilities in the River Bend Station owner controlled area, and (3) a failure to update the emergency plan and procedures after the public was permitted access to facilities in the owner controlled area. The licensee has entered these issues into its

corrective action program in CR-RBS-2001-1713 and CR-RBS-2002-0183. This issue was preliminarily determined to have substantial safety significance (Yellow) because it represented a failure to meet a risk-significant emergency preparedness planning standard. UPDATE: On July 31, 2002, a Notice of Violation (EA-02-036) was issued regarding this issue. The violation was as follows: 10 CFR 50.54(q) states, in part, that a licensee authorized to possess and operate a nuclear power reactor shall follow and maintain in effect emergency plans which meet the standards of 10 CFR 50.47(b). 10 CFR 50.47(b)(7) requires that onsite emergency response plans for nuclear power reactors meet the following standard, which states, in part: "Information is made available to the public on a periodic basis on how they will be notified and what their initial actions should be in an emergency..." Contrary to the above, between 1985 and February 1, 2002, the licensee's emergency plan was not adequate to assure that information was made available to members of the public using River Bend Station's owner controlled area regarding how members of the public would be notified of an evacuation order and what their initial actions should be in an emergency. Specifically, the licensee had not provided information to members of the public using the West Feliciana Community Development Foundation, the security firing range, the activity center, the outage campground, the Sportsman's Association base camp, and adjacent hunting and fishing areas in the owner controlled area about: (1) the process used to notify the public of an emergency, (2) circumstances under which the public in the licensee's owner controlled area would be directed to assembly and radiological monitoring stations, (3) the predetermined locations of the assembly and radiological monitoring stations, (4) evacuation routes to the predetermined assembly and radiological monitoring stations, and (5) the radiological monitoring and decontamination process. This violation is associated with a White Significance Determination Process finding. The NRC performed this supplemental inspection to assess the licensee's evaluation associated with the failure to meet the requirements of 10 CFR 50.54(q), in that the licensee did not follow and maintain emergency plans and procedures which meet the standards in 10 CFR 50.47(b)(7). This performance issue was previously characterized as having low to moderate risk significance (White) in NRC Inspection Report 50-458/2002-05. During this supplemental inspection, performed in accordance with Inspection Procedure 95001, the inspector noted that although some weaknesses in the root cause analysis were apparent, the licensee performed a comprehensive evaluation of the White finding. The licensee's evaluation identified the primary root causes of the performance issue to be inadequate implementation of the public information program and inadequate 10 CFR 50.54(q) evaluations. Given the licensee's acceptable performance in addressing the issue, the White finding associated with this issue will only be considered in assessing plant performance for a total of four quarters in accordance with the guidance in Inspection Manual Chapter 0305, "Operating Reactor Assessment Program." The issue was identified in the first quarter of 2002, therefore it will no longer be considered in assessing plant performance after the fourth quarter of 2002. Supplemental Inspection documented in NRC IR 50-458/02-08.

Inspection Report# : [2002005\(pdf\)](#)



Significance: Mar 20, 2002

Identified By: NRC

Item Type: NCV NonCited Violation

Reduction in Emergency Plan Effectiveness without Prior NRC Approval

This noncited violation is described in a letter to the licensee dated July 31, 2002, regarding the "Final Significance Determination for a White Finding and Notice of Violation." Green. A noncited violation of very low risk significance was identified for failure to comply with the requirements of 10 CFR 50.54(q). Between 1985 and January 2002, the licensee reduced the effectiveness of its emergency plan without Commission approval when it: (1) changed from the use of security vehicles equipped with permanently-mounted public address systems to the use of vehicles without such systems, and relied on portable public address systems stored onsite, (2) canceled emergency plan implementing procedure EIP-2-026, "Evacuation, Personnel Accountability, and Search and Rescue," Revision 11, and (3) permitted several changes in the public's use of the River Bend Station owner controlled area without evaluation of the impact of those changes on the emergency plan. 10 CFR 50.54(q) requires, in part, that each nuclear power plant licensee may make changes to its emergency plans without Commission approval only if the changes do not decrease the effectiveness of the plans and the plans, as changed, continue to meet the standards of 10 CFR 50.47(b) and the requirements of Appendix E of 10 CFR Part 50. The decrease in effectiveness of the emergency plan resulting from the failure to evaluate changes in the station owner controlled area, changes to emergency plan implementing procedures, and changes in emergency notification methods used by security officers, was a performance deficiency. The finding was more than minor because it was associated with one of the Emergency Preparedness cornerstone attributes (Plan Changes) and affected the associated cornerstone objective. Using the Emergency Preparedness Significance Determination Process, the inspector determined the violation had very low risk significance because the violation did not constitute a failure to meet an emergency planning standard as defined by 10 CFR 50.47(b). Because of the very low safety significance and because the licensee included the finding in their corrective action program as Condition Report 2002-0183, this finding is being treated as a noncited violation in accordance with Section VI.A of the NRC Enforcement Policy.

Inspection Report# : [2002005\(pdf\)](#)

Occupational Radiation Safety

Public Radiation Safety

Physical Protection

Miscellaneous

Last modified : March 25, 2003